

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6
BEFORE THE ADMINISTRATOR

In the Matter of:	§	
	§	
Devon Energy Production Company, L.P.	§	EPA Docket No.
Eagle Ford Facilities, Texas	§	CAA 06-2018-3302
	§	
Respondent	§	

ADMINISTRATIVE ORDER ON CONSENT

The following Administrative Compliance Order on Consent (“Consent Order”) is issued pursuant to the authority of Section 113(a)(1)(A) of the Clean Air Act, 42 U.S.C. § 7413(a)(1)(A) (hereinafter referred to as “the Act”). Section 113(a)(1) of the Act authorizes the Administrator of the United States Environmental Protection Agency (“EPA”) to issue an order requiring compliance to any person whom the Administrator finds to be in violation of the Act. The authority to issue this Consent Order has been delegated to the Regional Administrator of EPA Region 6, and re-delegated to the Director of the Compliance Assurance and Enforcement Division, EPA Region 6.

STATUTORY AND REGULATORY BACKGROUND

1. The Clean Air Act is designed to protect and enhance the quality of the nation’s air so as to promote public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).
2. Section 109(a) of the Act, 42 U.S.C. § 7409(a), requires the Administrator of EPA to publish national ambient air quality standards (“NAAQS”) for certain pollutants.

The NAAQS establish primary air quality standards to protect public health and secondary standards to protect public welfare.

3. To achieve the objectives of the NAAQS and the Act, Section 110(a) of the Act, 42 U.S.C. § 7410(a), requires each State to adopt a state implementation plan (“SIP”) that provides for the implementation, maintenance, and enforcement of the NAAQS, and to submit it to the Administrator of EPA for approval.

4. The State of Texas has adopted a SIP that has been approved by EPA. *See* 40 C.F.R Part 52, Subpart SS. The Texas SIP includes authorization for Texas to establish a permit by rule (“PBR”) program, which can be found at 30 T.A.C. Chapter 106 – Permits by Rule. *See* 40 C.F.R. § 52.2270(c).

5. 30 T.A.C. § 106.4(c) provides a general requirement for facilities subject to a permit by rule: “[t]he emissions from the facility shall comply with all rules and regulations of the [Texas Commission on Environmental Quality] and with the intent of the Texas Clean Air Act (“TCAA”), including protection of health and property of the public, and all emissions control equipment shall be maintained in good condition and operated properly during operation of the facility.”

6. Subchapter O of Chapter 106 of the Texas Administrative Code regulates permitting by rule for oil and gas facilities that produce more than a de minimis level of emissions, but too little for other permitting options. *See* 30 T.A.C. §§ 106.4(a) and 106.351-59.

- a. Certain conditions are applicable to oil and gas site (“OGS”) facilities as delineated at 30 T.A.C. § 106.352(a): “This section applies to all stationary facilities, or groups of facilities, at a site which handle gases and liquids associated with the production, conditioning, processing, and pipeline transfer of fluids or gases found in geologic formations on or

beneath the earth's surface including, but not limited to, crude oil, natural gas, condensate, and produced water”.

- b. The provisions of 30 T.A.C. § 106.352(e) specify “BMP and Minimum Requirements. For any new project, and any associated emission control equipment registered under this section, paragraphs (1) - (5) of this subsection shall be met as applicable. These requirements are not applicable to existing, unchanging facilities. Equipment design and control device requirements listed in paragraphs (6) - (12) of this subsection only apply to those that are chosen by the operator to meet the limitations of this section.”
- c. 30 T.A.C. § 106.352(e)(1) requires “[a]ll facilities which have the potential to emit air contaminants must be maintained in good working order and operated properly during facility operations.”
- d. 30 T.A.C. § 106.352(e)(11) requires that “[f]lares used for control of emissions from production” be designed and operated such that “flares must be lit at all times when gas streams are present.” 30 T.A.C. § 106.352(e)(11)(E).
- e. 30 T.A.C. § 106.352(l)(1) requires that “flares shall meet the requirements of § 106.492.”
- f. 30 T.A.C. § 106.492(l)(B) states that every flare subject to this section “shall be equipped with a continuously burning pilot or other automatic ignition system that assures gas ignition”
- g. 30 T.A.C. § 106.352(m), Table 8, states that “[t]he time, date, and duration of any loss of flame, pilot flame, or auto-ignition shall be recorded.”
- h. 30 T.A.C. § 106.352(e)(5)(C) requires that “[t]ank hatches, not designed to be completely sealed, shall remain closed (but not completely sealed in order to maintain safe design functionality) except for sampling, gauging, loading, unloading, or planned maintenance activities.”
- i. 30 T.A.C. § 106.352(j)(2) requires that monitoring and records for demonstrations of compliance shall include the requirements listed in Table 8 in 30 T.A.C. § 106.352(m).

- j. The provisions of 30 T.A.C. § 106.352(l) apply “to new and modified facilities.” This section provides that “[a]ny oil or gas production facility, carbon dioxide separation facility, or oil or gas pipeline facility consisting of one or more tanks, separators, dehydration units, free water knockouts, gunbarrels, heater treaters, natural gas liquid recovery units, or gas sweetening and other gas conditioning facilities . . . are permitted by rule” for “those facilities named which handle gases and liquids associated with the production, conditioning, processing, and pipeline transfer of fluids found in geologic formations beneath the earth’s surface.” 30 T.A.C. § 106.352(l).

7. Subchapter F of Chapter 116 of the Texas Administrative Code regulates standard permits for air pollution control projects that reduce or maintain authorized emission rates for existing facilities. This Subchapter also establishes standards for emission control equipment. *See* 30 T.A.C. § 116.620.

- a. The standard permit regulations state that “[a]ll representations with regard to construction plans, operating procedures, and maximum emission rates in any registration for a standard permit become conditions upon which the facility, or changes thereto, must be constructed and operated.” 30 T.A.C. § 116.115(2).
- b. The standard permit regulations further provide that “facilities covered by the standard permit may not be operated unless air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations.” 30 T.A.C. § 116.615(9).
- c. 30 T.A.C. § 116.620 establishes standards for emission controls at oil and gas facilities.
- d. 30 T.A.C. § 116.620(a)(12) requires adequate combustion in flares and pilot flame monitoring.
- e. 30 T.A.C. § 116.620(b)(1) requires “[f]loating roofs or equivalent controls” on “all new or modified storage tanks. . .” and “[i]n lieu of a floating roof, tank emissions may be routed to a destruction device such that a minimum VOC destruction efficiency of 98% is achieved or a vapor control system such that a minimum VOC recovery efficiency of 95% is achieved.” 30 T.A.C. § 116.620(b)(1)(D)(i) and (ii).

8. EPA is authorized by Section 113 of the Act, 42 U.S.C. § 7413, to take action to ensure that air pollution sources comply with all federally applicable air pollution control requirements. These include requirements promulgated by EPA and those contained in federally-enforceable SIPs or permits.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

9. Devon Energy Production Company, L.P. (“Devon Energy”) is a “person” within the meaning of Section 113(a) of the Act, 42 U.S.C. § 7413(a), and as defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).

10. On February 28, 2014, Devon Energy completed the acquisition of approximately 194 oil and natural gas production facilities in the Eagle Ford Shale formation in Texas from GeoSouthern Energy Corporation (the “Acquired Facilities”).

11. That same day, February 28, 2014, Devon Energy submitted to the Texas Commission on Environmental Quality (“TCEQ”) a Notice of Audit stating Devon Energy’s intent to conduct an audit of the Acquired Facilities under the Texas Environmental, Health, and Safety Audit Privilege Act, Tex. Health & Safety Code §§ 1101.001-1101.158.

12. On June 17, 2014, Devon Energy notified TCEQ that its audit of the Acquired Facilities had discovered violations of TCEQ air quality regulations and permits. Immediately thereafter, Devon Energy began to undertake corrective actions to address the violations, while providing periodic updates to TCEQ.

13. On May 28, 2015, Devon Energy notified TCEQ that it had completed the following corrective actions at those Acquired Facilities requiring such actions to ensure compliance:

- a. installation and replacement of vapor recovery units (“VRUs”) and vapor recovery towers (“VRTs”);
- b. installation and replacement of flares;
- c. replacement of tank pressure relief valves, thief hatches, and gaskets;
- d. replacement of fiberglass tanks with steel tanks;
- e. installation of additional compressors;
- f. installation of larger diameter flare piping to enhance flare performance;
- g. reconfiguration and installation of equipment, including piping and valves, based on evaluations of current site operations and potential for vapor emissions; and
- h. commissioning redesigned flares from multiple manufacturers based on actual flow rates and waste gas compositions specific to the Eagle Ford Shale formation.

14. On September 19, 2016, TCEQ confirmed that Devon Energy had successfully completed these corrective actions.

15. In October and November of 2015, EPA conducted helicopter flyovers of the Acquired Facilities and additional, subsequently-constructed oil and gas extraction and production facilities producing from the Eagle Ford Shale formation (collectively, the “Eagle Ford Facilities”) to assess energy extraction facility emissions using Optical Gas Imaging technology.

16. On December 29, 2015, EPA sent Devon Energy video captures of unlit flares at some of Devon Energy’s Eagle Ford Facilities and requested further evaluation and additional corrective actions at these facilities. Devon Energy subsequently initiated further investigations and corrective action of the flares at the Eagle Ford Facilities.

17. Based upon its review of the images obtained during the flyovers, corresponding ground surveys conducted by EPA inspectors during the same timeframe

as the flyovers, and preliminary permit information available from online state databases for oil and gas facilities, EPA Region 6 notified Devon Energy of potential violations of the Texas SIP on May 5, 2016. Devon Energy thereafter undertook additional corrective actions to achieve and maintain compliance at the Eagle Ford Facilities.

18. On June 23, 2016, Devon Energy and EPA Region 6 met to confer on the potential violations of the Texas SIP and to discuss ongoing operations, maintenance efforts, and the permitting status of Devon Energy's Eagle Ford Facilities.

19. On August 12, 2016, EPA Region 6 issued an Information Request to Devon Energy under the authority of Section 114 of the Clean Air Act. The Information Request sought information related to Devon Energy's Eagle Ford Facilities.

20. On November 17, 2016, Devon Energy submitted its response to EPA's Information Request. Devon Energy provided comprehensive information regarding the Eagle Ford Facilities, including: permit registrations and applications; equipment maintenance activities; flare, pressure relief valve, thief hatch, and piping system evaluations and replacements; and standard operating procedures at each of the Eagle Ford Facilities.

21. Included in this response was information pertaining to Devon Energy's continued efforts to ensure compliance through ongoing, additional corrective action measures undertaken since TCEQ's approval of Devon Energy's earlier corrective action measures. These additional corrective measures, which Devon Energy further described to EPA and TCEQ in a meeting on June 8, 2017, included:

- a. upgrading flares (e.g., reconfiguring 138 flare tips and installing 307 thermocouples with Supervisory Control and Data Acquisition ("SCADA") capability, 105 auto ignitors with pilots, 104 air assist

packages, and pressure gauges on flame arrestors for monitoring purposes);

- b. upgrading oil tanks (e.g., upgrading thief hatches to Enardo Model 660L, upgrading all Buna gaskets to Vitton gaskets, and upgrading 940 series Enardo relief valves to 950 series relief valves (or equivalent));
- c. upgrading produced water tanks by replacing 173 fiberglass tanks with steel tanks; and
- d. increasing leak detection and repair efforts (e.g., modifying pneumatic pumps connected to tanks to route emissions back to flares and increasing the frequency of infrared camera surveys).

22. EPA has conducted a comprehensive review of the information gathered during the flyovers and subsequently provided by Devon Energy. Based on this review, EPA has made the following findings for the Eagle Ford Facilities:

- a. Devon Energy violated 30 T.A.C. § 106.4(c) by failing to maintain in good condition and properly operate the emissions control equipment at certain facilities;
- b. Devon Energy violated 30 T.A.C. § 106.492(l)(B) by failing to equip certain facilities with a continuously burning pilot or automatic ignition system that assures gas ignition;
- c. Devon Energy violated 30 T.A.C. § 106.352(e)(11)(E) by failing to operate flares used for control of emissions from production units such that the flares are lit at all times when gas streams are present;
- d. Devon Energy violated 30 T.A.C. § 106.352(m), Table 8, by failing to record the time, date, and duration of any loss of flame, pilot flame, or auto-ignition.
- e. Devon Energy violated 30 T.A.C. § 106.352(e)(1) by failing to ensure that hatch seals were maintained in good working order and operated properly during facility operations;
- f. Devon Energy violated 30 T.A.C. § 106.352(e)(5)(C) by failing to ensure that thief hatches, which are not designed to be completely sealed, were closed except during sampling, gauging, loading, unloading, or planned maintenance activities;

- g. Devon Energy violated 30 T.A.C. § 116.615(9) by failing to ensure that equipment was maintained in good working order and operating properly during normal facility operations.
- h. Devon Energy violated 30 T.A.C. § 116.620(a)(12) by failing to ensure adequate combustion in flares and failing to properly conduct pilot flame monitoring; and
- i. Devon Energy violated 30 T.A.C. § 116.620(b)(1)(D) by failing to either (i) install a floating roof on storage tanks or (ii) route tank emissions to a destruction device such that a minimum VOC destruction efficiency of 98% is achieved or to a vapor recovery system such that a minimum VOC recovery efficiency of 95% is achieved.

23. On May 5, 2016, more than thirty days before the issuance of this Consent Order, the Respondent was notified of the violations alleged herein. On December 14, 2017, the Respondent and the State of Texas were notified of the violations alleged herein, in accordance with Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1).

24. The parties to this Consent Order agree that an opportunity to confer has been satisfied in accordance with Section 113(a)(4) of the Act, 42 U.S.C. § 7413(a)(4).

25. The parties further agree that in order to avoid protracted litigation, and in the best interest of all the parties and the environment, this Administrative Order will be entered into on Consent and by mutual agreement of the parties.

26. Only for the purposes of this proceeding, including any subsequent proceeding by EPA to enforce this document, Devon Energy admits the jurisdictional allegations contained herein; however, Devon Energy neither admits nor denies the specific findings of fact and conclusions of law contained in this Consent Order.

27. Devon Energy also consents to and agrees not to contest EPA's jurisdiction to either issue this Consent Order or enforce its terms. Further, Devon Energy will not contest EPA's jurisdiction to either compel compliance with this Consent Order

in any subsequent enforcement proceedings, whether administrative or judicial, or require Respondent's full compliance with the terms of this Consent Order or impose sanctions for violations of this Consent Order. Respondent consents to the terms of this Consent Order.

ORDER ON CONSENT

28. Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1), provides in pertinent part that the Administrator may issue an Order requiring compliance with any requirement of a state implementation plan. Pursuant to this authority, EPA has decided to issue this Consent Order after investigating all relevant facts, taking into account Devon Energy's compliance history, efforts made by Devon Energy to comply with applicable regulations, and based upon the foregoing Findings of Fact and Conclusions of Law herein.

29. Devon Energy has consented to, and is hereby ordered to satisfy, the following requirements regarding the Eagle Ford Facilities within one year of the effective date of this Consent Order:

- a. For any Acquired Facilities that did not undergo an engineering evaluation of vapor control systems as part of the audit and corrective actions undertaken for TCEQ, Devon Energy shall perform an engineering evaluation that ensures vapor control systems (including VRUs, VRTs, and flares), storage tanks, and associated piping at the Acquired Facilities are properly designed and adequately sized as to prevent an unauthorized release of vapors to the atmosphere. As part of this evaluation of facilities not previously evaluated, Devon Energy shall assess the maximum instantaneous amount of vapors that are routed to a vapor control system during normal operations, including dump events where liquid is transferred from a separator to storage tanks. Devon Energy shall confirm that facilities are built to engineering evaluation specifications as part of its Operational Readiness Review ("ORR") process to ensure that its Eagle Ford Facilities are properly designed, constructed, and ready to operate in compliance with permit and regulatory requirements.

- b. Devon Energy shall install or modify equipment based on the results of the engineering evaluation to minimize leaks and ensure that emissions are properly routed to a flare or vapor control system so as to achieve the minimally required destruction or recovery efficiency.
- c. Devon Energy shall implement a Management of Change (“MOC”) process for its Eagle Ford Facilities to evaluate proposed facility physical and operational modifications to ensure adequate design, construction, and operation of production equipment and emission control systems.
- d. To ensure the ORR and MOC processes are properly implemented, Devon Energy shall include these processes in its periodic internal corporate audits of environmental, health and safety programs.
- e. Devon Energy shall develop and implement a computer-based, real-time SAP work order system to ensure that equipment – including valves, pumps, and connectors found to be leaking upon inspection – is repaired promptly.
- f. Devon Energy shall inspect all flares at the Eagle Ford Facilities to ensure that flares are properly equipped and that flares used for the control of emissions from production are continuously lit when gas streams are present. Based on these inspections, Devon shall, as necessary, replace or upgrade flares, install an automatic ignition system with a pilot on flares, equip flares with air assist packages or reconfigure flare tips to ensure continuous vapor combustion at all times the Eagle Ford Facilities are operational. Devon shall also include in its efforts, as necessary, the installation of pressure gauges on flame arrestors to monitor their proper operation. During the inspection and repair of flares, Devon Energy shall ensure that flare flowlines are properly configured and shall reconfigure flowlines as may be necessary to ensure proper flow and combustion of gas.
- g. Devon Energy shall inspect each of the Eagle Ford Facilities to determine whether a VRU and/or VRT is required and, if a VRU and/or VRT is already present, Devon Energy shall ensure that the VRU and/or VRT is operating in compliance with applicable regulations. If a new VRU is required, Devon Energy shall ensure that the VRU is designed and operated to capture the mass content of methane and VOC in the gases flashed from the VRT.
- h. Devon Energy shall replace all produced water tanks constructed of fiberglass with tanks constructed of steel.
- i. Devon Energy shall inspect and, as necessary, upgrade thief hatches and gaskets on storage tanks.

- j. Based on engineering and site evaluations, Devon Energy shall upgrade tank pressure relief valves to a type designed for better sealing and pressure holding capacity.
- k. Devon Energy shall upgrade flare line piping with larger diameter piping to enhance flare performance where appropriate.
- l. Devon Energy shall install compressors and modify pneumatic pumps (e.g., route emissions back to flares) to reduce emissions at those Eagle Ford Facilities where appropriate.
- m. Devon Energy shall conduct leak detection and repair (“LDAR”) surveys at all of the Eagle Ford Facilities subject to 40 C.F.R. Part 60, Subpart OOOOa. Devon Energy shall also establish a program to ensure that LDAR surveys continue to be conducted at least biannually.
- n. Devon Energy shall use infrared cameras on a quarterly basis to verify whether maintenance, inspections, and product improvements and/or replacements have been effective and whether additional maintenance or repair is required.
- o. Devon Energy shall provide EPA with periodic reports, in writing, within 90 days and 180 days of the effective date of this Consent Order. In those periodic reports, Devon Energy shall summarize all of the activities performed and all equipment installed as required by this Order.

30. EPA acknowledges that Devon Energy may have already implemented some of these requirements and acknowledges that activities completed since Devon Energy’s acquisition of the Acquired Facilities on February 28, 2014, may satisfy the requirements of this Consent Order.

31. At the request of EPA, in consultation with TCEQ, and based on Devon Energy’s experience with the Acquired Facilities, Devon Energy has developed a checklist of recommended “best practices” for ensuring environmental compliance at acquired existing oil and gas production facilities. That checklist is in Attachment A to this Consent Order.

32. Any information or correspondence submitted by Devon Energy to EPA under this Consent Order shall be addressed to the following:

Steve Thompson, Air Branch Chief
Compliance Assurance and Enforcement Division (6EN-AA)
U.S. EPA, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733
Phone: (214) 665-7115
Email: thompson.steve@epa.gov

33. To the extent this Consent Order requires Devon Energy to submit any information to EPA, Devon Energy may assert a business confidentiality claim covering part or all of that information, but only to the extent and only in the manner described in 40 C.F.R. § 2.203. EPA will disclose information submitted under a confidentiality claim only as provided in 40 C.F.R Part 2, Subpart B. *See* 41 Fed. Reg. 36,902 (Sept. 1, 1976). If Devon Energy does not assert a confidentiality claim, EPA may make the submitted information available to the public without further notice to Devon Energy. Emission data provided under Section 114 of the Act, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R Part 2, Subpart B. “Emission data” is defined in 40 C.F.R. § 2.301.

34. By signing this Consent Order, Devon Energy acknowledges that this Consent Order will be available to the public and agrees that this Consent Order does not contain any confidential business information.

GENERAL PROVISIONS

35. Pursuant to Section 113(a)(4) of the Act, 42 U.S.C. § 7413(a)(4), this Consent Order shall be effective when fully executed, as set forth below in Paragraph 52, shall not exceed a term of one year, and shall be nonrenewable.

36. The provisions of this Consent Order shall apply to and be binding upon Devon Energy, its officers, directors, agents, and employees solely in their capacity of acting on behalf of Devon Energy.

37. Devon Energy neither admits nor denies any of the factual or legal determinations made by the EPA in this Consent Order.

38. The provisions of this Consent Order shall be transferable to any other party, upon sale or other disposition of the Eagle Ford Facilities. Upon such action, the provisions of this Consent Order shall then apply to and be binding upon any new owner/operator, its officers, directors, agents, employees, and any successors in interest.

39. By signing this Consent Order, the undersigned representative of Devon Energy certifies that he or she is fully authorized by the Respondent to execute and enter into the terms and conditions of this Consent Order and has the legal capacity to bind Devon Energy to the terms and conditions of this Consent Order.

40. Nothing in this Consent Order shall be construed to affect EPA's authority under Section 114 of the Act, 42 U.S.C. § 7414.

41. Nothing in this Consent Order shall be construed to prevent or limit EPA's civil and criminal authorities, or that of other Federal, State, or local agencies or departments to obtain compliance, penalties, or injunctive relief under any applicable Federal, State, or local laws or regulations, including the power of the EPA to undertake

any action against Devon Energy or any person in response to conditions that may present an imminent and substantial endangerment to the public health, welfare, or the environment.

42. Nothing contained in this Consent Order shall affect the responsibility of Devon Energy to comply with all other applicable Federal, State, or local laws or regulations, including Section 303 of the Act, 42 U.S.C. § 7603.

43. EPA does not waive any rights or remedies available to EPA for any violations by Devon Energy of Federal laws, regulations, statutes, or permitting programs.

44. Any and all information required to be maintained or submitted pursuant to this Consent Order is not subject to the Paperwork Reduction Act of 1995, 44 U.S.C. §§3501 et seq., because it seeks to collect information from specific entities to assure compliance with this administrative action.

45. By signing this Consent Order, Devon Energy certifies that the information it has supplied concerning this matter was at the time of submission, and is, to the best of its knowledge and belief, truthful, accurate, and complete for each submission, response, and statement. Devon Energy acknowledges that there are significant penalties for submitting false or misleading information, including the possibility of fines and imprisonment for knowing submission of such information, under 18 U.S.C. § 1001.

46. EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Devon Energy's failure to comply with any of the requirements of this Consent Order. This Consent Order shall not

be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies, powers, and/or authorities, civil or criminal, which EPA has under any statutory, regulatory, or common law authority of the United States.

47. This Consent Order does not resolve any civil or criminal claims of the United States for the violations alleged in this Consent Order; nor does it limit the rights of the United States to obtain penalties or injunctive relief under the Act or other applicable federal law or regulations.

48. Devon Energy has entered into this Order in good faith without trial or adjudication of any issue of fact or law.

49. Respondent waives any right to judicial review of this Order.

50. The parties shall bear their own costs and fees in this action, including attorneys' fees.

FAILURE TO COMPLY

51. Failure to comply with this Consent Order may result in an enforcement action for appropriate injunctive relief as well as civil penalties pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b) or, in appropriate cases, criminal penalties.

EFFECTIVE DATE

52. This Consent Order shall become effective upon the later of the two signatures below.

2/15/18
Date

Gregg Jacob
Gregg Jacob
Vice President, Texas Business Unit
Devon Energy Production Company, L.P.

2/21/2018
Date

CS
Cheryl T. Seager
Director
Compliance Assurance and Enforcement
Division

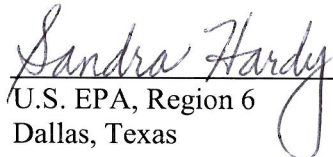
CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing Administrative Order on Consent was placed in the United States mail to the following by the method indicated:

CERTIFIED MAIL - RETURN RECEIPT REQUESTED: # 70073020000015228731

Devon Energy Production Company, L.P.
Attn.: Gregg Jacob
333 West Sheridan Avenue
Oklahoma City, OK 73102-5015

Date: 2-22-2018



U.S. EPA, Region 6
Dallas, Texas

**ATTACHMENT A: NEW OWNER CHECKLIST
FOR AN ACQUISITION OF OIL AND GAS PRODUCTION
FACILITIES**

Pre-Acquisition

- ☒ Request Records and Perform File Review
 - Obtain and review appropriate environmental compliance documentation, including:
 - permits;
 - equipment inventories;
 - emissions inventories;
 - engine stack testing reports and schedules;
 - excess emissions reports;
 - flare operation records;
 - greenhouse gas data and reporting;
 - leak detection and repair (“LDAR”) survey reports;
 - New Source Performance Standards (“NSPS”), National Emission Standards for Hazardous Air Pollutants (“NESHAP”), and Title V required reporting;
 - engine, compressor, and miscellaneous equipment maintenance plans and records;
 - spill and emergency response plans and records;
 - solid and hazardous waste generation, storage and disposal records;
 - naturally-occurring radioactive material (“NORM”) survey and management records;
 - well-completion information; and
 - other information necessary to confirm that appropriate documentation and reporting has been generated, retained, and submitted.

- ☒ Perform Preliminary Compliance Evaluation
 - Confirm that proper permits have been obtained and/or exemptions have been documented and ascertain whether new or modified permits may be needed.
 - Evaluate whether greenhouse gas reporting obligations, emission inventory responsibilities, release and spill reporting and other reporting requirements are being met.
 - Review reported production and emissions data and determine whether emissions violations may be occurring.

- Confirm that required spill response and emergency response plans have been prepared and are compliant with applicable regulations.
 - Confirm that management processes and procedures exist and are being implemented for solid and hazardous waste management as well as NORM.
- ☒ Conduct a Phase I Environmental Site Assessment
- Obtain an independent assessment of the environmental compliance status of the sites and facilities being acquired.
 - Ensure the Phase I is compliant with ASTM Standard E1527-13.
- ☒ Prepare to Assume Facility Obligations
- Identify applicable requirements for transferring permits and authorizations into the name of the new owner and comply with any pre-acquisition notification requirements.
 - Prepare to complete all required reporting for entire regulatory reporting period.
- ☒ Consider Utilizing State and Federal Audit Laws and Policies
- Review EPA's audit policies, including the "Interim Approach to Applying the Audit Policy to New Owners" and the "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations."
 - Evaluate the relevant state audit laws and policies (if they exist), including audit notification requirements.
 - Determine whether a formal facility-wide or facilities-wide audit would be useful and whether self-disclosure of violations or potential violations is appropriate.

Post-Acquisition

- ☒ Perform Site Inspections
- Compare equipment inventories against those provided pre-acquisition, and modify as necessary based on site visits and observations.
 - Inspect and evaluate oil and water storage tanks and associated hatches, valves, gaskets, and pressure relief devices.
 - Consider whether the materials used are compatible with the gas compositions and whether they will deteriorate at unexpected rates.
 - Ensure emergency pressure relief devices are set at the proper pressure set points.
 - Ensure flares and combustors are operating with a continuous pilot flame and that flame arrestors are properly installed.

- Consider technology upgrades to the flares and combustors.
 - Consider reconfiguration of flare tips and installation of thermocouples with Supervisory Control and Data Acquisition capability, auto ignitors with pilots, air assist packages, and pressure gages for flame arrestors.
 - Evaluate the operation of tanks, separators, compressors, vapor recovery units/towers, and other operational equipment.
 - Conduct optical gas imaging survey to detect and correct any gas leaks or fugitive emissions.
 - Inspect and address liquid leaks and staining at the well site, particularly near well heads, flares, combustors, storage tanks, and separators.
 - Develop or review protocols for collection of condensate and gas samples and for ensuring quality control in sampling efforts.
 - Confirm that there are no uncontrolled venting sources during normal operations.
 - Confirm that facilities have any required spill and emergency response plans and that the plans are adequate and compliant for the facilities as constructed and operated.
 - Confirm that solid and hazardous waste and NORM are managed in compliance with applicable regulations.
- ☒ Develop a Scope of Work for Post-Acquisition Engineering Assessments and Corrective Action
- Establish an overall plan for ensuring compliance with various regulatory programs, correcting violations discovered during pre-acquisition due diligence and post-acquisition inspections, and implementing new compliance management protocols.
 - Include in the plan performance of engineering assessments of equipment used at each facility, permit reviews, anticipated short-term and long-term corrective action (including repairs and replacement of equipment), steps for implementing a compliance management system, and a schedule for periodic reviews of facility compliance and ongoing operation and maintenance.
 - Estimate and secure resources, including in-house and outside engineers and construction personnel to perform the engineering assessments and repair and replacement of equipment as well as other corrective action that may be needed.

- ☑ Conduct Engineering Assessment of Newly-Acquired Facilities
 - Use condensate and gas samples, equipment inventories, and production rates to perform process flow modeling (e.g., ProMax modeling) and confirm that site equipment and design sufficiently address vapor emissions and meet regulatory requirements.
 - Confirm that all emissions sources – including process equipment fire tubes, gas aspirated generators, pneumatic pumps, and pneumatically actuated control valves – have been identified and accounted for in determining total emissions.
 - Based on site inspections and the engineering assessment, re-evaluate whether the facilities are properly permitted; prepare permit applications or revisions where necessary.
 - Use engineering assessment results to revise the equipment specifications and process configuration to ensure vapor control systems, where required, adequately handle maximum instantaneous vapor emissions, including working, breathing, or flashing losses from the tank batteries.
 - Based on site inspections and engineering assessments evaluate the sufficiency of each facility's spill containment adequacy and retention capacity.

- ☑ Conduct Equipment Repair and Replacement
 - Based on the site inspections and engineering assessments:
 - Develop a list of new equipment and piping to be procured, including flares, combustors, vapor recovery units/towers, tank hatches, pressure relief valves, piping, and gaskets;
 - As appropriate, repair, replace, upgrade, and install equipment, including vapor recovery units/towers, flares, combustors, tank pressure relief valves, tank hatches and gaskets, and compressors; and
 - As appropriate, replace any piping, valves, flame arrestors, or other equipment that is inadequately sized for the flow of condensate and volume of emissions.
 - As appropriate add, upgrade or replace spill containment capability.
 - Evaluate other potential facility equipment improvements, such as replacing fiberglass tanks with steel tanks.

- ☑ Integrate Newly-Acquired Facilities into the Company's Environmental Compliance Management System.
 - Ensure all NSPS and NESHAP regulated units are identified in, and integrated into, the new owner's compliance management system.

- Ensure all facilities are integrated into the new owner's programs for managing solid waste and NORM.
- Ensure all spill and emergency response plans conform to regulatory requirements for such programs.
- Confirm that operator responsibilities and priorities, facility inspection and repair protocols, and other best practices manuals and checklists are being utilized at the newly-acquired facilities.

Continued Monitoring and Corrective Action

- ☑ Implement Emission Surveillance Program to Confirm Engineering Design and Re-Design
 - Develop standard program for inspecting well sites and equipment with optical gas imaging cameras to confirm that each site has adequate vapor control systems.
 - Perform regular surveys with optical gas imaging cameras to detect leaks and fugitive emissions; ensure surveys and survey frequency comply with NSPS and state requirements.
 - Regularly inspect flares to ensure proper ignition and burning of emissions; ensure flare inspections and inspection frequency comply with NSPS and state requirements.
 - Ensure proper functioning of flares and the presence of a pilot flame.
- ☑ Implement Operation and Maintenance Program to Maintain Compliance
 - Conduct training to ensure immediate and long-term compliance with environmental laws and regulations.
 - Establish document generation and retention protocols, personnel roles and responsibilities, safety protocols, and work order systems to ensure problems are timely identified and addressed.
 - Conduct regular inspections with standard site inspection checklist that includes evaluation of well pad, flares, separators, heater treaters, tank batteries, compressors, fuel skid, well heads, spill containment, solid waste and chemical storage, and miscellaneous facility-wide operations.
 - Consider system re-designs as changes in operating conditions occur.
 - Implement a quality control program that ensures the quality, efficiency, and performance of facility maintenance activities.